#### **REMARKS**

The Office Action dated June 13, 2008, has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto.

#### **Status of the Claims**

Claims 31, 36, 38-40, 42, 43, 46-49, 55, 56, 58, 59, 61-63, 67 and 76-81 have been amended to more particularly point out and distinctly claim the subject matter of the invention. Claims 33, 53, 54, 66, 69, 72 and 75 have been cancelled without prejudice or disclaimer. New claims 82-129 have been added. No new matter has been added. Thus, claims 31, 32, 35-43, 45-52, 58-65, 67, 68, 70, 71, 73, 74 and 76-129 are currently pending in the application and are respectfully submitted for consideration.

# Allowable Subject Matter

Applicant notes with appreciation the Examiner's indication that claims 54 and 61 would be allowable if rewritten in independent form, although claim 54 has been cancelled from the present application. Applicant respectfully submits that the remaining currently pending claims also patentably distinguish over the cited art for at least the reasons presented below.

# Rejections under 35 U.S.C. § 101

Claim 81 was rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Specifically, the Office Action stated on page 5 that "Claim 81 defines a computer readable medium that should be 'embodied with' a computer program." Claim

81 has been amended herein to recite a "computer readable medium encoded with a computer program".

Claims 31, 36, 49, 76 and 77 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Specifically, the Office Action stated on page 5 that these claims "recite method steps that are not limited from only occurring in a computer processor". Claims 31 and 36 have been amended to recite that the operations are performed by a processor. Claim 49 is a method claim and recitations of structure are not necessary for method claims, as is discussed further below with respect to the rejection under 35 U.S.C. § 112, second paragraph.

With respect to claims 76 and 77, Applicant respectfully notes that these claims are means-plus-function claims, which "may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof" (see 35 U.S.C. § 112, sixth paragraph). As such, it is not necessary to amend these claims to recite structure that identifies how or where the claimed features are performed, and Title 35 of the United States Code explicitly preempts any requirement for such structure.

Accordingly, it is respectfully submitted that the rejections are overcome and respectfully requested that the rejection be withdrawn.

### Rejections under 35 U.S.C. § 112

Claim 81 was rejected under 35 U.S.C. § 112, first paragraph, as being nonenabling. Specifically, the Office Action stated on page 6 that "[t]he disclosure of a computer program critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976)". The Office Action then stated on page 6 that "[t]he Examiner finds no evidence/support in the specification (or figures) that a computer program was contemplated." Applicant respectfully traverses the rejection and respectfully submits that this statement is contrary to both *Mayhew* and the MPEP.

MPEP § 2164.08(c) states that "[a] feature which is **taught as critical in a specification** and is not recited in the claims should result in a rejection of such claim under the enablement provision section of 35 U.S.C. 112. See *In re Mayhew*, 527 F.2d 1229, 1233, 188 USPQ 356, 358 (CCPA 1976)" (emphasis added). However, the Office Action asserted that there is no evidence or support in the specification for a computer program. Applicant respectfully submits that the position that a computer program is taught as critical by the specification, yet is not disclosed therein, is contradictory and cannot be maintained.

Further, Applicant respectfully submits that use of a computer program is indeed supported by the present specification. Applicant respectfully notes that the standard for enablement is not whether something is explicitly stated in the specification. Rather, MPEP § 2164.01 states that "[a]ny analysis of whether a particular claim is supported by the disclosure in an application requires a determination of whether that disclosure, when filed, contained sufficient information regarding the subject matter of the claims as to enable **one skilled in the pertinent art** to make and use the claimed invention" (emphasis added). In other words, the test is "is the experimentation needed to practice

the invention undue or unreasonable" by such a person (see *Id*.). The factors for making a determination of undue experimentation include, but are not limited to:

- (A) The breadth of the claims;
- (B) The nature of the invention;
- (C) The state of the prior art;
- (D) The level of one of ordinary skill;
- (E) The level of predictability in the art;
- (F) The amount of direction provided by the inventor;
- (G) The existence of working examples; and
- (H) The quantity of experimentation needed to make or use the invention based on the content of the disclosure.

(See MPEP § 2164.01(a)). Applicant notes that these factors have not been considered on the record.

In the present case, devices are discussed in the specification that are known to implement software, such as a Mobile Station (MS) and a Wireless Mobile Center (WMC). Software may offer certain benefits over hardwired solutions, such as updatability. While it is possible to implement the logic of some embodiments of the present invention in hardware alone, Applicant respectfully submits that a person of ordinary skill in the art would readily understand that software can also be used. In fact, the Office Action appears to implicitly take notice that some embodiments of the present invention may be implemented via software as the Office Action stated on page 5 that "Claims 31, 36, 49, 76 and 77 recite method steps that are not limited from only occurring in a computer processor". Applicant does not believe that a person who fails to understand that such devices can carry out functionality using software would qualify as a person of ordinary skill in the art in this case.

Accordingly, it is respectfully submitted that the rejection is overcome and respectfully requested that the rejection be withdrawn.

Claims 31, 36, 49, 76 and 77 were rejected under 35 U.S.C. § 112, second paragraph, as being incomplete for omitting essential elements. Specifically, citing MPEP § 2172.01, the Office Action stated on page 6 that "[w]hile these claims are method claims, the examiner notes that they do note recite 'what device' is performing the method. These claims merely recite that steps occur but do not recite where and thus they simply read on a computer program and not a method." Of the above-rejected claims, only claim 49 is a method claim. Claims 31 and 36 are apparatus claims and claims 76 and 77 are means-plus-function claims. Claims 31 and 36 recite structure, such as a "processor", and per the above, there is no requirement for the recitation of structure for means-plus-function claims under 35 U.S.C. § 112, sixth paragraph. With respect to method claim 49, Applicant respectfully traverses the rejection.

MPEP § 2172.01 states that "[a] claim which omits matter disclosed to be essential to the invention as described in the specification or in other statements of record may be rejected under 35 U.S.C. 112, first paragraph, as not enabling. *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). See also MPEP § 2164.08(c)." "Such essential matter may include missing elements, steps or necessary structural cooperative relationships of elements described by the applicant(s) as necessary to practice the invention" (see *Id.*). However, there is no requirement under this section of the MPEP, nor under any U.S. statute, regulation or case law, that requires the recitation of a device performing the steps of a method claim. In fact, the very absence of such structure is one

of the defining characteristics of a method claim, and omitting structure does not amount to a "missing element" under MPEP § 2172.01.

Accordingly, it is respectfully submitted that the rejection is overcome and respectfully requested that the rejection be withdrawn.

### **Incomplete Office Action**

Applicant respectfully notes that while listed under the heading of a rejection, claim 39 was not actually rejected in the Office Action. 37 C.F.R. § 1.104(b) requires that the Office Action must be complete as to all matters. Because no reasoning was provided in the outstanding Office Action, the Action is incomplete. Applicant respectfully notes that if any rejection of these claims is presented in the next Office Action, the rejection will be presented for the first time and the next action cannot be made final since the claims will not have been given "second or subsequent consideration" under the rejection as required for proper finality by 37 C.F.R. § 1.113.

## Rejection under 35 U.S.C. § 103

Claims 31-33, 35-38, 40-43, 45-52, 55, 56, 58, 59, 60, 62 and 64-81 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ray et al. (U.S. Patent No. 6,424,638) in view of (Keski-Heikkilaet et al. (6,882,844) or Vikberg et al. (6,925,074)) and Ritter (U.S. Patent No. 6,289,221). Per the above, claim 39 was not actually rejected in the Office Action. With respect to the remaining rejected claims, the Office Action took the position on pages 7-12 that the combination of Ray et al., Keski-Heikkilaet et al., Vikberg et al. and Ritter teaches all of the features of the rejected claims. Applicant respectfully submits that Ray et al., Keski-Heikkilaet et al., Vikberg et al. and Ritter, both

individually and in combination, fail to teach or suggest the features of the above-rejected claims. Reconsideration of the claims is respectfully requested.

Independent claim 31, from which claims 32, 35-41 and 64-66 depend, recites an apparatus including a processor configured to identify a cell of a first telecommunication network as a neighboring cell by a second telecommunication network using cell identity information for a cell of the first telecommunication network by using a cell identity information structure of the second telecommunication network. The first telecommunications network is a different network from the second telecommunications network.

Independent claim 42, from which claims 43, 45-48 and 67-69 depend, recites an apparatus including a receiver configured to receive cell identities from cells of a first telecommunications network and a second telecommunication network. Cell identities of the cells from both the first telecommunications network and second telecommunication networks use a cell identity information structure of the second telecommunication network. The apparatus also includes a processor configured to determine a need to change serving cells, to initialize a process of changing a serving cell to another cell, and to provide seamless mobility between the first telecommunications network and the second telecommunication network. The first telecommunications network is a different network from the second telecommunications network.

Independent claim 49, from which claims 50-54 and 70-72 depend, recites a method including transmitting cell identity information to a mobile station. The cell identity information is stored in a first telecommunication network using a cell identity

providing seamless mobility between the first telecommunication network and the second telecommunication network. The first telecommunications network is a different network from the second telecommunications network.

Independent claim 55, from which claims 56, 58-63 and 73-75 depend, recites a transmitter configured to communicate with a first telecommunication network and a second telecommunication network and a receiver configured to receive cell identity information for a cell of the first telecommunication network using a cell identity information structure of the second telecommunication network. The first telecommunications network is a different network from the second telecommunications network.

Independent claim 76, from which claim 77 depends, recites an apparatus including identifying means for identifying a cell of a first telecommunication network as a neighboring cell by a second telecommunication network using cell identity information for a cell of the first telecommunication network by using a cell identity information structure of the second telecommunication network. The first telecommunications network is a different network from the second telecommunications network.

Independent claim 78, from which claim 79 depends, recites an apparatus including receiving means for receiving cell identities from cells of a first telecommunications network and a second telecommunication network. Cell identities of cells from both the first telecommunications network and second telecommunication

networks use a cell identity information structure of the second telecommunication network. The apparatus also includes determining means for determining a need to change serving cells, and to initialize a process of changing a serving cell to another cell, and handing over means for providing seamless mobility between the first telecommunications network and the second telecommunication network. The first telecommunications network is a different network from the second telecommunications network.

Independent claim 80 recites an apparatus including communicating means for communicating with a first telecommunication network and a second telecommunication network and receiving means for receiving cell identity information for a cell of the first telecommunication network using a cell identity information structure of the second telecommunication network. The first telecommunications network is a different network from the second telecommunications network.

Independent claim 81, from which claims 125-131 depend, recites a computer program embodied with a computer readable medium that controls a processor to perform a process, including transmitting cell identity information to a mobile station. The cell identity information is stored in a first telecommunication network using a cell identity information structure of a second telecommunication network. The process also includes providing seamless mobility between the first telecommunication network and the second telecommunication network. The first telecommunications network is a different network from the second telecommunications network.

As will be discussed below, <u>Ray et al.</u>, <u>Keski-Heikkilaet et al.</u>, <u>Vikberg et al.</u> and <u>Ritter</u>, both individually and in combination, fail to teach or suggest the features of the presently pending claims.

Ray et al. generally discusses "performing a handover of a wireless call between two different types of wireless systems" (column 1, lines 12-14).

When a serving mobile switching center (MSC) determines that there is not another MSC belonging to the same type of wireless system to which a handover can be performed, the serving MSC sends an identity message to an Internet Gatekeeper via an Internet Gateway for the serving MSC. This identity message inquires whether there are any other types of wireless systems nearby. The Internet Gatekeeper maintains a database of all existing wireless systems within the area served by the Internet Gatekeeper. The Internet Gatekeeper chooses a target MSC of another wireless system (if possible), and transmits the identity of this target MSC back to the currently serving MSC. Thereafter, the currently serving MSC performs the handover to the target MSC by routing signaling messages and voice or data communications through the Internet Gateways and the Internet Gatekeeper to the target MSC.

(Column 1, line 63, through column 2, line 12, of Ray et al.).

Keski-Heikkilaet et al. generally discusses "a method and system for changing a subscriber profile on the basis of the identity of the particular base station currently serving the subscriber's terminal equipment in a mobile communication network" (column 1, lines 10-13). "[I]nformation signals are sent by each base station and received by the terminal equipment of each subscriber, each of which terminal equipment typically comprises a mobile station provided with or including a subscriber identity module (SIM)" (column 2, lines 4-8, of Keski-Heikkilaet et al.) "The information signals sent by each base station include a permanent base station identity designation, and changes to each subscriber profile are made on the basis of the permanent identity designation of the

base station currently serving that subscriber's terminal equipment, as received by that terminal equipment from the base station in whose communication service area the terminal equipment is currently located" (column 2, lines 9-16, of Keski-Heikkilaet et al.).

<u>Vikberg et al.</u> generally discusses providing "an improved communication network and network elements that enable a uniformity of service whether a subscriber uses a fixed or mobile access to telecommunication services" (column 1, lines 50-53). "By providing access to the public mobile network service through an unlicensed radio interface, that by definition will be low power and have a small range compared to conventional access networks such as the base station subsystems BSS in GSM or URAN in UMTS, and by relaying upper layer messages in a transparent manner, i.e. without mapping or similar interworking, the same service and subscription can be retained by the subscriber without perceiving a difference in the level and presentation of service obtainable" (column 2, lines 4-12, of Vikberg et al.).

Ritter generally discusses that "[b]y arranging for a cluster size associated with a first radio communications apparatus embodied within the base stations of a mobile radio system to be a multiple of a cluster size associated with a second radio communications apparatus also embodied within the base stations of the mobile radio system, the frequency re-use patterns associated with the first and second radio communications apparatus may be integrated together, within a portion of the radio frequency spectrum already allocated to a mobile radio system communicating with the first communications apparatus" (column 3, lines 14-23, of Ritter).

Independent claim 1 recites, in part, that cell identity information for a cell of a first telecommunication network uses a cell identity information structure of a second telecommunication network. Independent claims 42, 49, 55, 76, 78, 80 and 81, which each have their own scope, recite similar features. The Office Action stated on page 3 that Ray et al. fails to teach these features. The Office Action then quoted sections from Vikberg et al., Keski-Heikkilaet and Ritter. Applicant respectfully submits that the cited art fails to teach or suggest these features.

The Office Action stated on page 9 that "Keski-Heikkilaet teaches a permanent Cell ID (see C4, L39-46) which can be viewed as a 'common' Cell ID format". However, this is not the case. The cited section of Keski-Heikkilaet et al. discusses "creating, by a server including supervision software, a permanent base station identity designation and assigning the permanent base station identity designation to the base station for uniquely identifying the base station independent of mobile communication network configuration changes, wherein the permanent base station identity designation is separate from a cell identity of a global cell identifier of the base station" (emphasis added). Thus, Keski-Heikkilaet et al. discusses a permanent base station identity, not a permanent cell identity. Keski-Heikkilaet et al. merely claims that the permanent base station identity and the cell identity of the global base station identifier are separate.

With respect to <u>Vikberg et al.</u>, the Office Action stated on page 3 that "Vikberg clearly teaches two different networks a mobile user can connect to whereby the one network stores (or broadcasts) itself as a base station of the other network (C5, L5-30),

which reads on the claims." The cited section of Vikberg et al. discusses that an "element of the fixed access network portion 10 ... contains radio transceivers that define a cell in a similar manner to the operation of a conventional GSM base station transceiver BTS 103" (see column 5, lines 5-11, of Vikberg et al.). "[W]hen viewed from elements of the core network 20 such as the mobile service switching centre (MSC) 202 and the serving GPRS support node (SGSN) 203, the fixed access network portion 10 constituted by the home base stations HBS 104 and the home base station controller HBSC 105 looks like a conventional access network portion 10" (column 5, lines 25-31, of Vikberg et al.). This is discussed in the context of maintaining uniform services when switching from a fixed network, such as a PBX, to a GSM network (see column 1, lines 30-45 and 50-53, of Vikberg et al.).

However, Applicant finds nothing in <u>Vikberg et al.</u> that teaches or suggests that cell identity information for a cell of a first telecommunication network uses a cell identity information structure of a second telecommunication network. Rather, <u>Vikberg et al.</u> merely discusses that a fixed access network portion may appear like a conventional access portion. This does not appear to have anything to do with cell identity information structure and rather is used to allegedly deliver uniform services across PBX and GSM systems. Further, nothing is cited or found in <u>Ritter</u> that teaches or suggests these features.

Claims 33, 66, 69, 72 and 75 have been cancelled without prejudice or disclaimer. Claims 32, 35-41, 43, 45-48, 50-52, 56, 58, 59, 60, 62, 64, 65, 67, 68, 70, 71, 73, 74, 77 and 79 depend from claims 31, 42, 49, 55, 76 or 78 and add further features thereto.

Thus, the arguments above with respect to the independent claims also apply to the dependent claims.

Per the above, <u>Ray et al.</u>, <u>Keski-Heikkilaet et al.</u>, <u>Vikberg et al.</u> and <u>Ritter</u>, both individually and in combination, fail to teach or suggest the features of the above-rejected claims under 35 U.S.C. § 103(a). Accordingly, it is respectfully submitted that the rejection is overcome and respectfully requested that the rejection be withdrawn.

### **New Claims**

New claims 82-129 have been added. New independent claims 82, 85, 90, 94, 98, 106, 114 and 120, which each have their own scope, recite similar features to independent claims 31, 42, 49 or 55. The new dependent claims, which each have their own scope, recite similar features to other previously pending dependent claims. Claims 128 and 129 depend from claims 31 and 76 and recite similar features to those cancelled from the independent claims in this Response. Thus, the arguments above with respect to the independent claims also apply to the new claims. Accordingly, for at least the reasons presented above, it is respectfully submitted that the new claims patentably distinguish over the cited art.

#### Conclusion

For at least the reasons presented above, it is respectfully submitted that claims 31, 32, 35-43, 45-52, 58-65, 67, 68, 70, 71, 73, 74 and 76-129 also patentably distinguish over the cited art. Accordingly, it is respectfully requested that the claims be allowed and the application be passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, Applicant's undersigned representative at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, Applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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